



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/622,752	07/18/2003	Dave Allen Soerens	KC-18,125.6	2759

7590 08/24/2005
Maxwell J Petersen
Pauley Peterson Kinne & Erickson
Suite 365
2800 West Higgins
Hoffman Estates, IL 60195

EXAMINER

JOHNSON, EDWARD M

ART UNIT	PAPER NUMBER
----------	--------------

1754

DATE MAILED: 08/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/622,752

Applicant(s)

SOERENS, DAVE

Examiner

Edward M. Johnson

Art Unit

1754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 12-21 and 23-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12-21 and 23-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-33 are rejected under 35 U.S.C. 103(a) as unpatentable over Harada et al. US 5,853,867.

Regarding claims 1, 14, 25, Harada '867 discloses an absorbent comprising cationic absorbent polymer and anionic absorbent polymer fixed to a substrate through a binder, which is crosslinked during or after polymerization (column 3, lines 45-48; column 5, lines 1-10; column 8, line 54 to column 9, line 16). The claimed binder species are disclosed (columns 4-5 and 8) and disclosed temperature is less than 120 degrees (Examples). An absorbent capacity of 5 g/g is disclosed.

Harada fails to disclose anhydrous salts or capillary desiccants.

It is considered that it would have been obvious to one of ordinary skill in the art at the time the invention was made to

Art Unit: 1754

use a capillary desiccant in the absorbent of Harada because Harada discloses starches (see column 8, lines 27-31) and acetate (see column 4, lines 38-40), which would obviously, to one of ordinary skill, suggest an anhydrous salt or a capillary desiccant (see also instant specification, pages 18-19).

Regarding claims 2-3 and 5, 12-13, 15-21, 23-24, Harada discloses above 30% by weight of polymer (see column 7, lines 50-55), which would at least suggest an optimum ratio of polymer to desiccant or mole percent.

Regarding claims 4, 7, 9-10, and 31-35 the claimed binder and polymer species are disclosed (columns 4-5 and 8) and the disclosed temperature is less than 120 degrees (Examples).

Regarding claims 6 and 8, Harada discloses cationic and anionic absorbent polymer (see column 7, lines 43-45).

Regarding claims 26-30, Harada discloses various intended uses (see columns 1-2).

3. Claims 1-33 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Gander US 3,951,893.

Gander discloses polymeric composition comprising a silane crosslinked interpolymer of alkyl acrylate (first monomer) and other unsaturated monomers (second monomer) the instant range. Suitable silane acrylate crosslinking monomers include the

Art Unit: 1754

alkoxysilane expressed in the present claims. The crosslinking occurs at drying temperature. The reference teaches the incorporation of a second monomer, which may be alkaline, acid labile, thus encompass the limitations expressed in claims (col. lines 16-38).

Gander fails to disclose anhydrous salt or capillary desiccant.

It is considered that it would have been obvious to one of ordinary skill in the art at the time the invention was made to use anhydrous salt or capillary desiccant in the composition of Gander because Gander discloses cellulosic paper (see column 7, lines 58-60) and maleic anhydride (claim 1), which would obviously, to one of ordinary skill, suggest anhydrous salt or capillary desiccant.

Response to Arguments

4. Applicant's arguments filed 8/18/05 have been fully considered but they are not persuasive.

It is argued that furthermore, Harada et al. discloses a cationic absorbent... preferably 50-150 degrees C. This is not persuasive because Applicant does not claim polymerization that does not occur "simultaneously" or does not crosslink an "already formed polymer". It is noted that the features upon which applicant relies (i.e., polymerization that does not occur

Art Unit: 1754

"simultaneously" or does not crosslink an "already formed polymer") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

It is argued that by the time the organic solvent is removed, the polymer is already formed and crosslinked. This is not persuasive for the reasons above.

It is argued that the polymer formed by Gander does not have significant binding characteristics. This is not persuasive because Gander discloses an absorbent pad composite (see column 8, lines 61-64).

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

Art Unit: 1754

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward M. Johnson whose telephone number is 571-272-1352. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley S. Silverman can be reached on 571-272-1358. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic

Application/Control Number: 10/622,752

Page 7

Art Unit: 1754

Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "EMJ", is written above the typed name.

Edward M. Johnson
Primary Examiner
Art Unit 1754

EMJ